REMARKS

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

In response to the Restriction Requirement, Applicants hereby elect, with traverse, to prosecute Group II (including claims 3-9, 11-12 and 23), and newly added claims 40-48 drawn to polynucleotides and compositions containing them.

Claims directed to methods of using the claimed polynucleotides (i.e. claims 13-15, 20, 21 and 49) could and should be examined together with the product claims from which they depend, per the Commissioner's Notice in the Official Gazette of March 26, 1996, entitled "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai, In re Brouwer* and 35 U.S.C. § 103(b)" which sets forth the rules, upon allowance of product claims, for rejoinder of process claims covering the same scope of products. Applicants presume these method claims will be rejoined, upon determining allowability of the product claims from which they depend.

Applicants reserve the right to prosecute the subject matter of non-elected claims in subsequent divisional applications.

Applicants believe that no fee is due with this communication. However, if the USPTO determines that a fee is due, the Commissioner is hereby authorized to charge Deposit Account No. 09-0108.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The first paragraph of page 1 has been amended as follows:

This application is a divisional application of U.S. application Serial Number 09/240,359 filed January 29, 1999, issued on July 3, 2001, as U.S. Patent No. 6,255,456, entitled CYCLIC GMP PHOSPHODIESTERASE, which is a divisional application of U.S. application Serial Number 08/987,466 filed December 9, 1997, issued on July 13, 1999, as **[now]** U.S. Patent No. 5,922,595, entitled CYCLIC GMP PHOSPHODIESTERASE, the contents of all which hereby incorporated by reference.

IN THE CLAIMS:

Claims 1, 2, 5, 10, 16-19 and 22 have been canceled.

Claims 3, 4, 8, 9, 11, 12, 20 and 23 have been amended as follows:

New claims 40-49 have been added:

3. **(Once Amended)** An isolated polynucleotide encoding a polypeptide [of claim 1] selected from the group consisting of:

a.) a polypeptide comprising the amino acid sequence of SEQ ID NO:1,

b) a polypeptide comprising a naturally-occurring amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:1,

c) a fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1, said fragment having cyclic nucleotide phosphodiesterase activity, and

d) an immunogenic fragment of a polypeptide having the amino acid sequence of SEQ ID NO:1.

4. **(Once Amended)** An isolated polynucleotide of claim 3 encoding a polypeptide [of claim 2] comprising the amino acid sequence of SEQ ID NO:1.

8. **(Once Amended)** A method for producing a polypeptide [of claim 1] encoded by the polynucleotide of claim 3, the method comprising:

a) culturing a cell under conditions suitable for expression of the polypeptide,

wherein said cell is transformed with a recombinant polynucleotide, and said recombinant polynucleotide comprises a promoter sequence operably linked to a polynucleotide [encoding the polypeptide of claim 1] of claim 3, and

b) recovering the polypeptide so expressed.

9. **(Once Amended)** A method of claim 8, wherein the polypeptide [has the] comprises the amino acid sequence of SEQ ID NO:1.

11. **(Once Amended)** An isolated polynucleotide [comprising a sequence] selected from the group consisting of:

a) a polynucleotide comprising the polynucleotide sequence of SEQ ID NO:2,

b) a polynucleotide comprising a naturally-occurring polynucleotide sequence [having] at least 90% [sequence identity] identical to the polynucleotide sequence of SEQ ID NO:2,

c) a polynucleotide [sequence] complementary to a polynucleotide of a),

d) a polynucleotide [sequence] complementary to a polynucleotide of b) and

e) an RNA [a ribonucleotide] equivalent of a)-d).

12. **(Once Amended)** An isolated polynucleotide comprising at least 60 contiguous [nucleic acids] nucleotides of a polynucleotide of claim 11.

20. **(Once Amended)** A method for screening a compound for effectiveness in altering expression of a target polynucleotide, wherein said target polynucleotide comprises a polynucleotide sequence of claim [11] 23, the method comprising:

a) exposing a sample comprising the target polynucleotide to a compound, under conditions suitable for the expression of the target polynucleotide,

b) detecting altered expression of the target polynucleotide, and

c) comparing the expression of the target polynucleotide in the presence of varying amounts of the compound and in the absence of the compound.

23. (Once Amended) A polynucleotide of claim 11, comprising the [amino acid] polynucleotide sequence of SEQ ID NO:2.

40. (New) A microarray wherein at least one element of the microarray is a polynucleotide of claim 12.

41. (New) An array comprising different nucleotide molecules affixed in distinct physical locations on a solid substrate, wherein at least one of said nucleotide molecules comprises a first oligonucleotide or polynucleotide sequence specifically hybridizable with at least 30 contiguous nucleotides of a target polynucleotide, and wherein said target polynucleotide is a polynucleotide of claim 11.

42. (New) An array of claim 41, wherein said first oligonucleotide or polynucleotide sequence is completely complementary to at least 30 contiguous nucleotides of said target polynucleotide.

43. (New) An array of claim 41, wherein said first oligonucleotide or polynucleotide sequence is completely complementary to at least 60 contiguous nucleotides of said target polynucleotide.

44. (New) An array of claim 41, wherein said first oligonucleotide or polynucleotide sequence is completely complementary to said target polynucleotide.

45. (New) An array of claim 41, which is a microarray.

46. (New) An array of claim 41, further comprising said target polynucleotide hybridized to a nucleotide molecule comprising said first oligonucleotide or polynucleotide sequence.

47. (New) An array of claim 41, wherein a linker joins at least one of said nucleotide molecules to said solid substrate.

48. **(New)** An array of claim 41, wherein each distinct physical location on the substrate contains multiple nucleotide molecules, and the multiple nucleotide molecules at any single distinct physical location have the same sequence, and each distinct physical location on the substrate contains nucleotide molecules having a sequence which differs from the sequence of nucleotide molecules at another distinct physical location on the substrate.

49. **(New)** A method of generating an expression profile of a sample which contains polynucleotides, the method comprising:

d) labeling the polynucleotides of the sample,

e) contacting the elements of the microarray of claim 40 with the labeled polynucleotides of the sample under conditions suitable for the formation of a hybridization complex, and

f) quantifying the expression of the polynucleotides in the sample.